

Anti-SHC Rabbit mAb

Purified Recombinant Rabbit Monoclonal Antibody

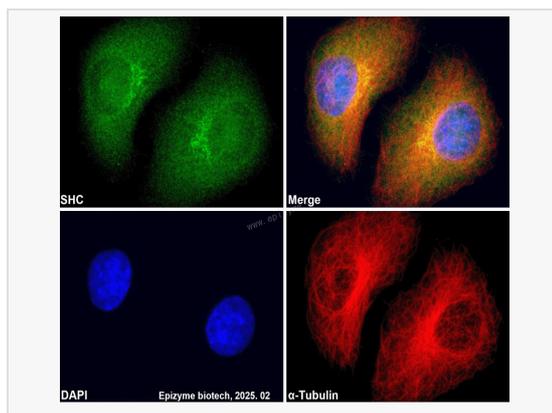
Catalog # R014790

Product Information

Application	WB, IF (Cell)/ICC, ELISA
Reactivity	Human, Mouse, Rat
Dilution	WB 1:1,000~1:2,000; IF 1:100~1:200
Host	Rabbit
Clonality	Monoclonal
Clone No.	97D40L72
Isotype	IgG
Label	Unconjugated
Immunogen	A synthesized peptide derived from human SHC
Format	Affinity purified monoclonal antibody supplied in PBS with 0.01% sodium azide and 50% glycerol, pH 7.3.
Storage	Shipped on wet ice. Store at -20°C. Stable for 24 months from date of receipt. Aliquoting is unnecessary for -20°C storage.
Precautions	Anti-SHC Rabbit mAb [97D40L72] is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Synonyms	FLJ26504, p66, p66SHC, SH2 domain protein C1, SHC (Src homology 2 domain containing) transforming protein 1, SHC 1, SHC A, SHC adaptor protein 1, Shc, SHC transforming protein 1, SHC transforming protein, SHC-transforming protein 1, SHC-transforming protein 3, SHC-transforming protein A, SHC1, SHC1_HUMAN, SHCA, Src homology 2 domain-containing-transforming protein C1.
Calculated MW	Calculated MW: 63 kDa; Observed MW: 46,52,66 kDa
Uniprot ID	P29353
Gene ID	6464
Background	This gene encodes three main isoforms that differ in activities and subcellular location. While all three are adapter proteins in signal transduction pathways, the longest (p66Shc) may be involved in regulating life span and the effects of reactive oxygen species. The other two isoforms, p52Shc and p46Shc, link activated receptor tyrosine kinases to the Ras pathway by recruitment of the GRB2/SOS complex. p66Shc is not involved in Ras activation. Unlike the other two isoforms, p46Shc is targeted to the mitochondrial matrix. Several transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Feb 2011]
Cellular Location	Cytoplasm; Mitochondrion matrix. Localized to the mitochondria matrix. Targeting of isoform p46Shc to mitochondria is mediated by its first 32 amino acids, which behave as a bona fide mitochondrial targeting sequence. Isoform p52Shc and isoform p66Shc, that contain the same sequence but more internally located, display a different subcellular localization and Mitochondrion. In case of oxidative conditions, phosphorylation at 'Ser-36' of isoform p66Shc, leads to mitochondrial accumulation.



Immunofluorescence - Anti-SHC Rabbit mAb [97D40L72]

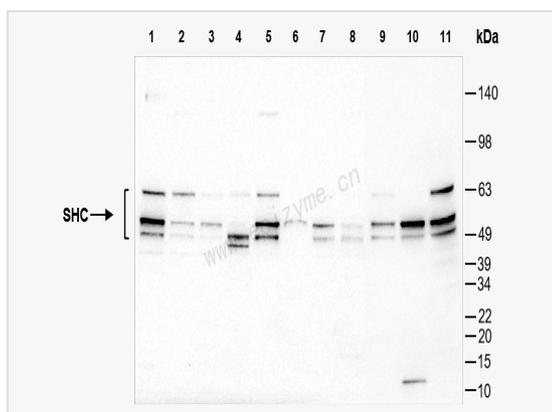
Sample: HeLa cells

The cells were fixed with 4% paraformaldehyde (10 min), permeabilized with 0.5% Triton X-100 for 10 minutes and then blocked with 5% BSA in 0.1% PBS-Tween for 0.5 hours.

Primary antibodies: R014790 at 1:100 dilution and α -tubulin Mouse Monoclonal Antibody (Cat. No. LF209) at 1:100 dilution

Secondary antibodies: Goat anti-Rabbit (488) at 1:1,000 dilution (shown in green) and Goat anti-Mouse (555) at 1:1,000 dilution (shown in red)

Nuclei were stained with DAPI (shown in blue).



Western Blot - Anti-SHC Rabbit mAb [97D40L72]

All lanes: R014790 at 1:1,000 dilution

Lane 1: HeLa (Human cervix adenocarcinoma epithelial cell) whole cell lysates

Lane 2: HepG2 (Human hepatocarcinoma epithelial cell) whole cell lysates

Lane 3: HCT116 (Human colorectal carcinoma epithelial cell) whole cell lysates

Lane 4: U2OS (Human osteosarcoma epithelial cell) whole cell lysates

Lane 5: T24 (Human bladder cancer epithelial cell) whole cell lysates

Lane 6: Jurkat (Human T lymphocytic leukemia cell) whole cell lysates

Lane 7: 293T (Human embryonic kidney cell) whole cell lysates

Lane 8: SCC-9 (Human tongue squamous carcinoma epithelial cell) whole cell lysates

Lane 9: C2C12 (Mouse myoblasts epithelial cell) whole cell lysates

Lane 10: Raw264.7 (Mouse mononuclear macrophage leukemia cell) whole cell lysates

Lane 11: PC-12 (Rat adrenal pheochromocytoma epithelial cell) whole cell lysates

Lysates/proteins at 10 μ g per lane.

Secondary antibody: Goat Anti-Rabbit IgG (H+L), HRP Conjugated (Cat. No. LF102) at 1:5,000 dilution

Predicted band size: 63 kDa

Observed band size: 46,52,66 kDa

Developed using the ECL technique (Cat. No. SQ201).